

Reply Brief

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BOARD OF PATENT APPEALS AND INTERFERENCES**

In re patent application of:
Bhide et al.

Atty. Docket No.: JP920030164US1

Serial No.: 10/729,166

Group Art Unit: 2165

Filed: December 5, 2003

Examiner: Syed, Farhan M.

For: OPTIMAL USE OF TRIGGERS FOR DETECTING DATABASE EVENTS

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPELLANTS' REPLY BRIEF

Sirs:

This Reply Brief is in response to the Examiner's Answer mailed June 25, 2007, setting a two-month statutory period for response. Therefore, this Reply Brief is timely filed.

A. Independent Claims 1 and 13-15

Appellants respectfully traverse the rejections in the Office Action of independent claims 1 and 13-15 based on the following discussion. The Appellants respectfully but strongly disagrees that the claimed invention is anticipated by Dayal. More particularly, independent claims 1 and 13-15 contain features, which are patentably distinguishable from Dayal. Specifically, claims 1 and 13-15 recite, in part, "selectively permanently removing the temporal events from said database based upon the changed temporal

10/729,166

Reply Brief constraints; and upon reaching said end of said lifespan of said each temporal event, permanently removing from said database said alarm associated with the permanently removed temporal event.” These features are neither taught or suggested in Dayal because in Dayal the temporal events are not permanently removed from the database.

Page 5 of the Examiner’s Answer suggests that Dayal teaches “upon reaching said end of said lifespan of said each temporal event, permanently removing from said database said alarms associated with the permanent removed temporal event” and states that the following phrase teaches this element of the Appellants’ claimed invention: “Rules refer to particular tables, and so are subject to the same controls as other metadata objects (e.g. views, constraints); thus if a table is dropped, all rules defined for it are no longer operative.” However, there is nothing in the above selections that remotely teaches permanent removal of the alarms from the database. Nonetheless, the Office Action concludes that an ordinary person skilled in the art may reasonably infer that the table can be removed from the database and thereby all temporal constraints and alarms associated with the targeted table can be manually removed.” However, this is not what the Appellants’ claim. The Appellants’ claimed invention clearly refers to permanent removal of the alarms from the database. However, the Office Action is stating that Dayal teaches inoperable rules. Clearly, one of ordinary skill in the art would surmise that an inoperable rule is wholly distinct from a permanently removed alarm. Furthermore, the Office Action offers no tangible proof or prior art reference of how one of ordinary skill in the art would infer this about permanent removal of the alarms and offers no tangible evidence to support this proposition other than providing an

Reply Brief
unsubstantiated conclusionary statement unsupported by Dayal.

Furthermore, MPEP §2131 states that “[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The argument presented in the Office Action does not coincide with the requirements of the MPEP in that the Office Action is arguing that one skilled in the art *may reasonably infer* that the Appellants’ permanently removed alarms are anticipated in Dayal. Rather, under a rejection under 35 USC 102(b) and under MPEP §2131 Dayal must teach every element of the claim; there is nothing in MPEP §2131 that states that a proper rejection may use a standard such as that provided in the Office Action (i.e., “may reasonably infer”). Here, Dayal fails to teach “upon reaching said end of said lifespan of said each temporal event, permanently removing from said database said alarms associated with the permanent removed temporal event.” Furthermore, the Office Action offers no additional prior art reference that teaches this as well. While, multiple references may be used in a rejection under 35 USC 102 (see MPEP §2131.01), there are only three instances when such a use of multiple references is permissible. First, to prove the primary reference contains an enabled disclosure. Second, to explain the meaning of a term used in the primary reference. Third, to show that a characteristic not disclosed in the reference is inherent. With respect to the first instance, enablement of the Dayal reference is not at issue here. With respect to the second and third instances, the Office Action offers no such tangible reference that explains the meaning of the terms used in the Dayal reference with respect to the alarms

Reply Brief
and the Office Action offers no such tangible reference that explains that the undisclosed characteristic regarding permanent removal of the alarms is inherent. Absent such a tangible reference, the rejection is deficient and improper. Additionally, merely stating that one of ordinary skill in the art would understand this does not properly constitute extrinsic evidence because the rejection lacks clarity in indicating that the missing descriptive matter is necessarily present in Dayal. The reason behind this is that the Appellants do not have the ability to read the reference that provides this information and determine whether it is proper within the context of the Appellants' invention and whether it is combinable with Dayal in the manner suggested by the Office Action. Accordingly, the rejection based on 35 USC 102(b) is improper for failing to provide tangible evidence in support of the rejection.

Section 2, Page 3, Paragraph 3 of Dayal merely states that:

Like any object, rules can be created, deleted, or modified.

In addition, rule objects have some special operations, including: **fire**, which causes a rule to be triggered; **enable**, which causes a rule to be activated; **disable**, which causes a rule to be deactivated (so that it won't be triggered even if its triggering event occurs).

The above language of Dayal makes clear that the rules that are disabled are merely deactivated, but are not permanently removed (or deleted) from the database. The Office Action offers no concrete evidence or reference in support of its conclusion that one of ordinary skill in the art would infer this to be equivalent. Indeed, such is not the

Reply Brief

case. Furthermore, Dayal indicates that the deactivated rule is merely not triggered when it becomes disabled, which indicates that the deactivated rule still remains on the database; it simply is not triggered when disabled. However, having these deactivated rules on the database system still require that the rules are residing on the database system. This is disadvantageous in that database memory is being utilized on deactivated elements. Conversely, in the Appellants' claimed invention, database memory is inherently saved due to the permanent removal of the alarms.

Again, Dayal is different from the Appellants' claimed invention, which permanently removes the temporal events and corresponding alarms from the database based upon the changed temporal constraints. Hence, in the Appellants' claimed invention a deactivated rule will not be triggered because it will not exist on the database, whereas in Dayal, a deactivated rule will not trigger because it is merely disabled (but still exists on the database and consumes processing resources nonetheless). This is a significant and patentable difference between the Appellants' claimed invention and Dayal because by permanently removing the triggers from the database significantly increases the overall system efficiency, thereby improving the overall system performance including system response time (as indicated in the Appellants' FIGS. 7-9).

Furthermore, there is nothing in Dayal that suggests incorporating alarms associated with a start and end of a lifespan of each temporal event, as the Appellants' claimed invention provides. Accordingly, Dayal is missing at least one element that the Appellants' claimed invention clearly provides, which under 35 U.S.C. §102 renders the Appellants' claimed invention patentable over Dayal. Therefore, the Appellants

Reply Brief respectfully submit that Dayal does not teach or suggest the features defined by independent claims 1 and 13-15 and as such, claims 1 and 13-15 are patentable over Dayal. In other words, Dayal fails to teach each and every feature of the Appellants' claimed invention as required under 35 U.S.C. §102(b). Therefore, the Board is respectfully requested to reconsider and withdraw the rejections to claims 1 and 13-15.

B. Dependent Claim 2

Page 7 of the Office Action of October 6, 2006 indicates that page 17, paragraph 2 of Dayal teaches the Appellants' dependent claim 2. However, the cited portion of Dayal merely refers to a database system aborting transactions containing errors, whereas the Appellants' claimed invention removes from the database temporal events that cannot evaluate as true. A reasonable reading of Dayal indicates that the error-containing transaction, while aborted, still remains on the database; it simply is not processed when aborted. However, having these aborted transactions on the database system still require that they reside on the database system. A simple analogy is when one deletes a file from his/her computer and it automatically goes to the "Recycle Bin" of the computer.

However, the file still remains on the computer until the Recycle Bin is emptied. In the current situation, and by analogy, Dayal's error-containing transaction would simply be aborted to the Recycle Bin, but would not be permanently removed from the system as Dayal offers no teaching of permanently removing such transactions from its system.

This is disadvantageous in that database memory is being utilized on non-processed and aborted elements. Conversely, in the Appellants' claimed invention, database memory is

Reply Brief
inherently saved due to the permanent removal of the temporal events that cannot evaluate as true. Accordingly, Dayal fails to teach each and every feature of the Appellants' claimed invention as required under 35 U.S.C. §102(b). Therefore, the Board is respectfully requested to reconsider and withdraw the rejections to claim 2.

C. Dependent Claim 3

Appellants submit that the prior art does not teach or suggest the claimed features of "limiting the lifespan of an event to the overlapping period of the lifespan of a parent event" as defined in dependent claim 3. The Examiner argues that this is taught by Dayal's "spawning" (Examiner's Answer, p. 12, para. 3). More specifically, the Examiner argues that "a trigger event (i.e., child event) may be contained inside another trigger event (i.e., parent event)" and that "spawning allows an overlapping period for an event to occur" (Examiner's Answer, p. 12, para. 3).

However, nothing within Dayal, including the portions cited by the Examiner's Answer, mentions *limiting the lifespan* of the child event to the overlapping period of the lifespan of the parent event. Instead, Dayal teaches that the lifetime of the child event includes more than the overlapping lifespan with the parent event. More specifically, as described on page 17, paragraph 3 of Dayal, when a rule execution subtransaction fails, the failure event is returned to its parent, which has the option of spawning a sibling subtransaction to repair the error. This may be accomplished through "the firing of *another* rule that is triggered by the failure event" (Dayal, p. 17, para. 3 (emphasis added)).

Reply Brief

Appellants submit that the lifespan of the “another rule” (child event) of Dayal is in addition to the lifespan of the parent event because the parent event “spawns” the “another rule” in response to a failure event. In other words, the child event is “another rule”, or a rule in addition to the parent event. Therefore, it is Appellants’ position that the prior art of record does not teach or suggest the claimed features of “limiting the lifespan of an event to the overlapping period of the lifespan of a parent event” as defined in dependent claim 3.

D. Dependent Claim 5

Appellants traverse the rejections because the prior art does not teach or suggest claimed features of “assigning a lifespan of an event having an undefined lifespan as the lifespan of a parent event” as defined by dependent claim 5.

Dayal does not disclose how the parent event is assigned. Instead, Dayal merely states that “the failure event is returned to its parent” (Dayal, p. 17, para. 3). Furthermore, Dayal does not disclose an event having an undefined lifespan. Instead, Dayal merely the parent event “has the option of spawning a sibling subtransaction” (Dayal, p. 17, para. 3).

Accordingly, Appellants submit that nothing within Dayal discloses how the parent event is assigned or an event having an undefined lifespan. Instead, Dayal merely discloses returning a failure event to its parent, wherein the parent has the option of spawning a sibling subtransaction. Therefore, it is Appellants’ position that the prior art

Reply Brief
does not teach or suggest claimed features of “assigning a lifespan of an event having an
undefined lifespan as the lifespan of a parent event” as defined by dependent claim 5.

Please charge any deficiencies and credit any overpayments to Attorney’s Deposit
Account Number 09-0441.

Respectfully submitted,

Dated: August 22, 2007

/Duane N. Moore/
Duane N. Moore
Registration No. 53,352

Gibb & Rahman, LLC
2568-A Riva Road, Suite 304
Annapolis, MD 21401
Voice: (410) 573-6501
Fax: (301) 261-8825
Customer Number: 29154